STEM-REGULATED, PLANT DEFENSE PROMOTER AND USES THEREOF IN TISSUE-SPECIFIC EXPRESSION IN MONOCOTS

ABSTRACT

The invention is directed to isolated promoters from stem-regulated, defense-inducible genes, such as OMT promoters. The promoters are useful in expression cassettes and expression vectors for the transformation of plants. Particularly, the invention provides transgenic plants of rice and sugarcane that have been modified such that expression of a heterologous coding sequence is directed by an OMT promoter and is limited to stem tissues or may be upregulated by the presence of a defense-inducing agent. The invention also discloses methods for producing the expression vectors and transgenic plants.